## FIG. 1

Add Nanocrystalline Particles to Medium Mix to Form Dispersion

Make Dispersion of Nanocrystalline Particles

Add One or More Silane Monomers to Solvent Add Catalyst Form Siloxane-Based Polymer

Make Surface-Treatment Solution

Add Surface Treatment Solution to Dispersion of Nanocrystalline Particles
Mix Such that Siloxane-Based Polymer Is Disposed On Surface of Particles

Make Surface-Treated Nanocrystalline Particles

Adjust Dispersion By Adding Water or Organic Solvent, If Desired Add Surface Treated Nanocrystalline Particles to Cross-Linkable Resin Mix to Form Dispersion

Make Film-Forming Composition

Clean and Condition Substrate
Apply Film-Forming Composition to Substrate
Form Film Through Crosslinking Of Resin

Form Film On A Substrate

FIG. 2

